INDEX TO VOL. VII (A).

AUTHORS' INDEX.

Agarwal, R. R. ..	*See* Jain and Agarwal.
Ananthakrishnan, R. ..	Effect of temperature on the Raman Spectrum of liquid CCl_4. Some Preliminary considerations, 196.
Auluck, F. C.	On conics connected with four or more lines, 5. The Volume of a tetrahedron, the areas of the faces being given, 279.
Bhagavantam, S. ..	Specific heats of liquids in relation to Raman Effect data, 245.
Bhagavantam, S., and Rao, B. Sundara Rama	Light-scattering and other allied physical properties of ordinary and heavy water, 35.
Bhatnagar, P. L. ..	On the summability of the conjugate series of Fourier series, 85.
Chowla, S.	On a trigonometric sum, 177.
Devadatta, S. C. ..	*See* Joshi and Devadatta.
Doss, K. S. Gururaja, and Rao, B. Sanjiva	A Theory of contact angles, 113.
Gogte, G. R.	Chemistry of β-aryl-glutaconic acids, Part IV, c-acetylation of β-aryl-glutaconic anhydrides: derivatives of α-aceto-β-aryl-glutaconic acids, 214.
Gupta, Hansraj ..	A generalisation of Leudesdorf's theorem, 390.
Heble, L. S., and Wheeler, T. S.	Kinetics of the reaction between benzyl chloride and formic acid, 411.
H. J. T.	Obituary—Lord Rutherford of Nelson, 357.
Iyengar, K. S. K. ..	A note on Narasinga Rao's problem relating to tetrahedra, 269. Theorems on the functional limits of derivatives of a function at infinity, 343. On Linear transformations of bounded sequences, I, 399.
Iyengar, K. S. K., and Iyengar, K. V.	On a problem relating to a tetrahedron, 305.
Iyengar, K. V. ..	*See* Iyengar and Iyengar.
Jain, D. K., and Agarwal, R. R.	On the amylase from the Indian water chestnut (*Trapa Bispinosa*, Roxb.). II. Studies with the purified powdered form of the enzyme, 384.
Joshi, N. K., and Devadatta, S. C.	Studies in three component systems, Part I. Systems composed of sulphuric acid, water and either zinc sulphate or magnesium sulphate, 130; Part II. The system composed of zinc sulphate, magnesium sulphate and water, 139.

Krishnan, R. S. ..	The reciprocity theorem in colloid optics and its generalisation, 21. Reciprocity theorem in colloid optics (case of orientated particles), 91. Studies on light-scattering in emulsions. Part I. Dilute simple emulsions, 98.
Mehra, Rup Kishore, and Pandya, K. C.	Condensation of malonanilic acid with aromatic aldehydes, 369. The condensation of aldehydes with amides, II. The condensation of cinnamaldehyde, 376.
Mehta, S. M. ..	*See* Suratkar and others.
Murty, G. V. L. Narasimha	Colourimetric estimation of nitrate in the presence of nitrite, 108.
Nayar, P. G. N. ..	The Raman spectrum and constitution of pentaerythritol, 251.
Nilakantan, P. ..	Magnetic anisotropy of naturally occurring substances. III. Wood and its constitution, 38.
Oke, B. Y.	The electro-static forces and the elasticity constants, 265.
Pandya, K. C.	*See* Mehra and Pandya.
Pandya, K. C., and Sodhi, T. S.	The condensation of aldehydes with amides. I. The condensation of salicyl aldehyde, 361. The condensation of aldehydes with malonic acid in the presence of organic bases. X. The condensation of 2:4-resorcylaldehyde, 381.
Paramasivan, S. ..	Technique of the painting process in the temple of Vijayalaya Cholisvaram in the Pudukkottai State, 282.
Pattabhiramayya, P ..	A study of the Raman effect in sodium nitrate, 229. The dispersion and optical anisotropy of molecular oxygen in relation to its absorption spectrum, 235.
Pillai, S. S.	On the addition of residue classes, 1.
Prasad, Mata	*See* Suratkar and others.
Ramdas, L. A., and Vaidyanathan, P. S.	Studies on the spreading of certain substances on a clean surface of water, Part I, 186.
Rangaswami, S., and Seshadri, T. R.	Fixation of the aromatic double bonds in the coumarin ring system, 8.
Rangaswami, S., Rao, V. Subba, and Seshadri, T. R.	Reactivity of the double bond in coumarins and related $\alpha:\beta$—unsaturated carbonyl compounds. Part V. Action of mercuric acetate on cinnamic acid and its derivatives 296; VI. Action of mercuric acetate on the methyl ethers of coumarinic and coumaric acids, 312.
Rao, A. Narasinga ..	On the Miquel-Clifford configuration, 68. Through a railway window, 156.
Rao, A. Veerabhadra ..	Effect of oblique refraction at the prism surfaces on the relative intensities of Raman lines, 208.

Rao, B. Sanjiva .. *See* Doss and Rao.

Rao, B. S. Madhava .. Question of invariance in the neutrino theory of light, 293.
Biquaternions in Born's Electrodynamics, 333.

Rao, B. Sundara Rama .. *See* Bhagavantam and Rao.

Rao, B. V. Raghavendra Dispersion of acoustic velocity in liquids, 163.

Rao, C. Venkata .. *See* Rao and others.

Rao, H. S. Subba .. Eulerian parameters and Lorentz transformations, 339.

Rao, K. Nagabhushana Theory of the Indian musical drums—Part I, 75.

Rao, P. Suryaprakasa, Rao, C. Venkata, and Seshadri, T. R. Chemical examination of *Erythrina indica*, 179.

Rao, S. N. .. .. Derivatives of 1-hydroxy-2-naphthoic acid. Part IV. Compounds derived from 4-nitro-1-hydroxy-2-naphthoic acid and its methyl ether, 261.

Rao, V. Subba .. *See* Rangaswami and others.

Samant, B. V. .. *See* Shah and Samant.

Seshadri, T. R. .. *See* Rangaswami and Seshadri.
See Rao and others.
See Rangaswami and others.

Seth, B. R. .. .. Transverse waves in canals, 104.

Shabde, N. G. .. The expansion of a function in a series of associated Legendre functions, 319.

Shah, R. C., and Samant, B. V. *c*-alkyl resorcinols. Part III. A direct synthesis of rhizonaldehyde, 266.

Singh, B. K. .. .. The physical identity of enantiomers. Part V. The relation between concentration and viscosity of solutions of *d*-, *l*- and *dl*-forms of camphor, *iso*-nitrosocamphors, camphorquinone, camphoric acid and sodium camphorate, 50.

Sodhi, T. S. .. .. *See* Pandya and Sodhi.

Suratkar, T. S., Mehta, S. M., and Prasad, Mata A study of the systems $CuSO_4$-$NiSO_4$-H_2O and $CuSO_4$-$CoSO_4$-H_2O, 393.

Vaidyanathan, P. S. .. *See* Ramdas and Vaidyanathan.

Vaidya, W. M. .. The flame spectra of some aliphatic halides. Part II. (2) ethyl bromide, 321.

Varadanam, Ch. I. .. Viscosity and jelly formation of concentrated sols of hydrous stannic oxide, 327.

Venkatachaliengar, K. .. On a problem of the tetrahedron, 257.

Venkatarayudu, T. .. Ideal theory of the Abelian group-algebra, 118.

Venkateswaran, C. S. .. The hydroxyl frequency in the Raman spectra of acids and acid salts, 13.
The Raman spectra of some inorganic compounds, 144.

Wheeler, T. S. .. *See* Heble and Wheeler.

TITLE INDEX.

Abelian group-algebra, ideal theory (Venkatarayudu), 118.

Acoustic velocity in liquids, dispersion (Rao), 163.

Amylase from the Indian water chestnut (*Trapa bispinosa,* Roxb.), II. (Jain and Agarwal), 384.

β-aryl-glutaconic acids, chemistry. Part IV. (Gogte), 214.

Born's Electro-dynamics, biquaternions (Rao), 333.

Colloid optics, reciprocity theorem, and its generalisation (Krishnan), 21.

Colloid optics, reciprocity theorem (case of orientated particles) (Krishnan), 91.

Colourimetric estimation of nitrate in the presence of nitrite (Murty), 108.

Component systems, three, studies—I, II (Joshi and Devadatta), 130, 139.

Condensation of aldehydes with amides. I (Pandya and Sodhi), 361.

Condensation of aldehydes with amides. II (Mehra and Pandya), 376.

Condensation of aldehydes with malonic acid in the presence of organic bases. Part X. (Pandya and Sodhi), 381.

Condensation of malonanilic acid with aromatic aldehydes (Mehra and Pandya), 369.

Conics connected with four or more lines (Auluck), 5.

Contact angles, theory (Doss and Rao), 113.

Coumarin ring system, fixation of the aromatic double bonds (Rangaswami and Seshadri), 8.

Coumarins and related $\alpha:\beta$-unsaturated carbonyl compounds reactivity of the double bond), V, VI (Rangaswami and others), 296, 312.

$CuSO_4$-$NiSO_4$-H_2O and $CuSO_4$-$CoSO_4$-H_2O, a study of the systems (Suratkar and others), 393.

Dispersion and optical anisotropy of molecular oxygen in relation to its absorption spectrum (Pattabhiramayya), 235.

Elasticity constants, electrostatic forces (Oke), 265.

Electro-static forces and the elasticity constants (Oke), 265.

Enantiomers, physical identity, V (Singh), 50.

Erythrina indica, chemical examination (Rao and others), 179.

Eulerian Parameters and Lorentz transformations (Rao), 339.

Flame spectra of some aliphatic halides. II (Vaidya), 321.

Fourier Series, on the summability of the conjugate series (Bhatnagar), 85.

Functional limits of derivatives of a function at infinity, theorems (Iyengar), 343.

Function, expansion, in a series of associated Legendre functions (Shabde), 319.

1-Hydroxy-2-naphthoic acid, derivatives, IV (Rao), 261.

Kinetics of the reaction between benzyl chloride and formic acid (Heble and Wheeler), 411.

Leudesdorf's theorem, generalisation (Gupta), 390.

Light-scattering and other allied physical properties of ordinary and heavy water (Bhagavantam and Rao), 35.

Light-scattering in emulsions, studies—I (Krishnan), 98.

Lorentz transformations, Eulerian parameters (Rao), 339.
Magnetic anisotropy of naturally occurring substances, III (Nilakantan), 38.
Miquel-Clifford configuration (Rao), 68.
Musical drums, Indian, theory—I (Rao), 75.
Neutrino theory of light, question of invariance (Rao), 293.
Optical anisotropy of molecular oxygen in relation to its absorption spectrum (Pattabhiramayya), 235.
Painting process, technique, in the temple of Vijayalaya Cholisvaram in the Pudukkottai State (Paramasivan), 282.
Railway window, through (Rao), 156.
Raman effect data, specific heat of liquids in relation to (Bhagavantam), 245.
Raman effect in sodium nitrate, study (Pattabhiramayya), 229.
Raman lines, effect of oblique refraction at the prism surfaces on the relative intensities (Rao), 208.
Raman spectra of acids and acid salts, hydroxyl frequency (Venkateswaran), 13.
Raman spectra of some inorganic compounds (Venkateswaran), 144.
Raman spectrum and constitution of pentaerythritol (Nayar), 251.
Raman spectrum of liquid CCl_4, effect of temperature, some preliminary considerations (Ananthakrishnan), 196.
Residue classes, addition (Pillai), 1.
Resorcinols, *c*-alkyl, Part III (Shah and Samant), 266.
Rutherford of Nelson, Lord (Obituary) (H. J. T.), 357.
Sequences, bounded, linear transformations—I (Iyengar), 399.
Specific heats of liquids in relation to Raman effect data (Bhagavantam), 245.
Sum, trigonometric (Chowla), 177.
Surface of water, clean, studies on the spreading of certain substances (Ramdas and Vaidyanathan), 186.
Tetrahedra, a note on Narasinga Rao's problem relating to (Iyengar), 269.
Tetrahedron, on a problem (Venkatachaliengar), 257.
Tetrahedron, on a problem relating to (Iyengar and Iyengar), 305.
Tetrahedron, the volume, the areas of the faces being given (Auluck), 279.
Transverse waves in canals (Seth), 104.
Viscosity and jelly formation of concentrated sols of hydrous stannic oxide (Varadanam), 327.